

## Draft Rules - Regional Haze

Version 4 - 5/26/06

### 006. GENERAL DEFINITIONS.

**XX. BART-Eligible Source.** Any of the following stationary sources of air pollutants, including any reconstructed source, which was not in operation prior to August 7, 1962, and was in existence on August 7, 1977, and has the potential to emit two hundred fifty (250) tons per year or more of any air pollutant. In determining potential to emit, fugitive emissions, to the extent quantifiable, must be counted. (40 CFR 51.301) ( )

- |           |  |     |
|-----------|--|-----|
| <u>a.</u> | <u>Fossil-fuel fired steam electric plants of more than two hundred fifty (250) million BTU's per hour heat input;</u> | ( ) |
| <u>b.</u> | <u>Coal cleaning plants (thermal dryers);</u>  | ( ) |
| <u>c.</u> | <u>Kraft pulp mills;</u>   | ( ) |
| <u>d.</u> | <u>Portland cement plants;</u>   | ( ) |
| <u>e.</u> | <u>Primary zinc smelters;</u>  | ( ) |
| <u>f.</u> | <u>Iron and steel mill plants;</u>   | ( ) |
| <u>g.</u> | <u>Primary aluminum ore reduction plants;</u>  | ( ) |
| <u>h.</u> | <u>Primary copper smelters;</u>  | ( ) |
| <u>i.</u> | <u>Municipal incinerators capable of charging more than two hundred fifty (250) tons of refuse per day;</u>            | ( ) |
| <u>j.</u> | <u>Hydrofluoric, sulfuric, and nitric acid plants;</u>   | ( ) |
| <u>k.</u> | <u>Petroleum refineries;</u>   | ( ) |
| <u>l.</u> | <u>Lime plants;</u>  | ( ) |
| <u>m.</u> | <u>Phosphate rock processing plants;</u>   | ( ) |
| <u>n.</u> | <u>Coke oven batteries;</u>  | ( ) |
| <u>o.</u> | <u>Sulfur recovery plants;</u>   | ( ) |
| <u>p.</u> | <u>Carbon black plants (furnace process);</u>  | ( ) |
| <u>q.</u> | <u>Primary lead smelters;</u>  | ( ) |
| <u>r.</u> | <u>Fuel conversion plants;</u>   | ( ) |
| <u>s.</u> | <u>Sintering plants;</u>   | ( ) |
| <u>t.</u> | <u>Secondary metal production facilities;</u>  | ( ) |
| <u>u.</u> | <u>Chemical process plants;</u>  | ( ) |
| <u>v.</u> | <u>Fossil-fuel boilers of more than two hundred fifty (250) million BTU's per hour heat input;</u>                     | ( ) |

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w. Petroleum storage and transfer facilities with a capacity exceeding three hundred thousand (300,000) barrels; ( )

x. Taconite ore processing facilities; ( )

y. Glass fiber processing plants; and ( )

z. Charcoal production facilities. ( )

**XX.** **Best Available Retrofit Technology (BART).** Means an emission limitation based on the degree of reduction achievable through the application of the best system of continuous emission reduction for each pollutant which is emitted by an existing stationary facility. The emission limitation must be established, on a case-by-case basis, taking into consideration the technology available, the costs of compliance, the energy and non-air quality environmental impacts of compliance, any pollution control equipment in use or in existence at the source, the remaining useful life of the source, and the degree of improvement in visibility which may reasonably be anticipated to result from the use of such technology. (40 CFR 51.301) ( )

**XX.** **Deciview.** A measurement of visibility impairment. A deciview is a haze index derived from calculated light extinction, such that uniform changes in haziness correspond to uniform incremental changes in perception across the entire range of conditions, from pristine to highly impaired. The deciview haze index is calculated based on the following equation (for the purposes of calculating deciview, the atmospheric light extinction coefficient must be calculated from aerosol measurements): (40 CFR 51.301) ( )

**a.**  $\text{Deciview Haze Index} = 10 \ln_e (b_{\text{ext}}/10\text{Mm}^{-1})$   
Where  $b_{\text{ext}}$  = the atmospheric light extinction coefficient, expressed in inverse megameters ( $\text{Mm}^{-1}$ ) ( )

**XX.** **Least Impaired Days.** The average visibility impairment (measured in deciviews) for the twenty percent (20%) of monitored days in a calendar year with the lowest amount of visibility impairment. (40 CFR 51.301) ( )

**XX.** **Most Impaired Days.** The average visibility impairment (measured in deciviews) for the twenty percent (20%) of monitored days in a calendar year with the highest amount of visibility impairment. (40 CFR 51.301) ( )

**XX.** **Natural Conditions.** Includes naturally occurring phenomena that reduce visibility as measured in terms of light extinction, visual range, contrast, or coloration. (40 CFR 51.301) ( )

**XX.** **Regional Haze.** Visibility impairment that is caused by the emission of air pollutants from numerous sources located over a wide geographic area. Such sources include, but are not limited to, major and minor stationary sources, mobile sources, and area sources. (40 CFR 51.301) ( )

### 107. INCORPORATIONS BY REFERENCE.

**03.** **Documents Incorporated by Reference.** The following documents are incorporated by reference into these rules: (5-1-94)

**d.** Requirements for Preparation, Adoption, and Submittal of Implementation Plans, Protection of Visibility, Identification of Integral Vistas, Subsection a, 40 CFR Part 51.304(a), revised as of July 1, 2005. (40 CFR 51.301, 304(a), 308(d) - change may be needed) (4-11-06)

### 204. PERMIT REQUIREMENTS FOR NEW MAJOR FACILITIES OR MAJOR MODIFICATIONS IN NONATTAINMENT AREAS.

**02.** **Additional Requirements.** The applicant must demonstrate to the satisfaction of the Department the following: (4-6-05)

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**d.** Effect on visibility. The effect on visibility of any federal Class I area, Class I area designated by the Department, or integral vista of a mandatory federal Class I Federal Area, by the new major facility or major modification is consistent with making reasonable progress toward ~~remedying existing and preventing future visibility impairment~~ the national visibility goal referred to in 40 CFR 51.300(a). The Department may take into account the costs of compliance, the time necessary for compliance, the energy and non-air quality environmental impacts of compliance and the useful life of the source. Any integral vista which the Federal Land Manager has not identified at least six (6) months prior to the submittal of a complete application, or which the Department determines was not identified in accordance with the criteria adopted pursuant to 40 CFR Part 51.304(a), may be exempted from Section 204 by the Department. (40 CFR 51.307(c)) (4-6-05) ( )

### 205. PERMIT REQUIREMENTS FOR NEW MAJOR FACILITIES OR MAJOR MODIFICATIONS IN ATTAINMENT OR UNCLASSIFIABLE AREAS.

**02.** Effect on Visibility. The applicant must demonstrate the effect on visibility of any federal Class I area, Class I area designated by the Department, or integral vista of a mandatory Class I Federal Area, by the new major facility or major modification is consistent with making reasonable progress toward the national visibility goal referred to in 40 CFR 51.300(a). The Department may take into account the costs of compliance, the time necessary for compliance, the energy and non-air quality environmental impacts of compliance and the useful life of the source. Any integral vista which the Federal Land Manager has not identified at least six (6) months prior to the submittal of a complete application, or which the Department determines was not identified in accordance with the criteria adopted pursuant to 40 CFR 51.304(a), may be exempted from this requirement by the Department. (40 CFR 51.307(c)) ( )

**023.** Exception to Incorporation by Reference of 40 CFR 52.21. Every use of the word Administrator in 40 CFR 52.21 means the Department except for the following: (4-6-05)

**034.** Nonmajor Requirements. If the proposed action meets the requirements of an exemption or exclusion under the provisions of 40 CFR 52.21 incorporated in Section 205, the nonmajor facility or stationary source permitting requirements of Sections 200 through 228 apply, including the exemptions in Sections 220 through 223. (4-6-05)

**583. -- 584.** (RESERVED). (CAN WE FIND A NEW LOCATION - NEED 4 NUMBERS; ONLY HAVE 2)

### XXX. REGIONAL HAZE RULES.

The purpose of Sections XXX through XXX is to address regional haze visibility impairment in mandatory Class I Federal Areas. (40 CFR 51.300(a)) ( )

### XXX. REASONABLE PROGRESS GOALS.

The Department will establish reasonable progress goals, expressed in deciviews for each mandatory Class I Federal Area located within Idaho. These goals will provide for reasonable progress towards achieving natural visibility conditions. The reasonable progress goals must provide for an improvement in visibility for the most impaired days over the period of the implementation plan and ensure no degradation in visibility for the least impaired days over the same period. (40 CFR 51.308(d)(1)) ( )

**01.** Process for Setting Reasonable Progress Goals. In establishing a reasonable progress goal for any mandatory Class I Federal Area within Idaho, the Department shall: (40 CFR 51.308(d)(1)(i)) ( )

**a.** Consider the costs of compliance, the time necessary for compliance, the energy and non-air quality environmental impacts of compliance, and the remaining useful life of any potentially affected sources, and include a demonstration showing how these factors were taken into consideration in selecting the goal. (40 CFR 51.308(d)(1)(i)(A)) ( )

**b.** Analyze and determine the rate of progress needed to attain natural visibility conditions by the year 2064. To calculate this rate of progress the Department will compare baseline visibility conditions to natural visibility conditions in the mandatory Class I Federal Area and determine the uniform rate of visibility improvement

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(measured in deciviews) that would need to be maintained during each implementation period in order to attain natural visibility conditions by 2064. In establishing the reasonable progress the Department will consider the uniform rate of improvement in visibility and the emission reduction measures needed to achieve it for the period covered by the implementation plan. (40 CFR 51.308(d)(1)(i)(B)) ( )

c. Consult with those States which may reasonably be anticipated to cause or contribute to visibility impairment in the mandatory Class I Federal Area. ( )

02. **Justification for Reasonable Progress Goals.** If the Department establishes a reasonable progress goal that provides for a slower rate of improvement in visibility than the rate that would be needed to attain natural conditions by 2064, the Department will demonstrate, based on the factors in Section XXX.01.a, that the rate of progress for the implementation plan to attain natural conditions by 2064 is not reasonable; and that the progress goal adopted by the Department is reasonable. The Department will provide to the public for review as part of its implementation plan an assessment of the number of years it would take to attain natural conditions if visibility improvement continues at the rate of progress selected by the Department as reasonable. (40 CFR 51.308(d)(1)(ii)) ( )

### XXX. LONG-TERM STRATEGY FOR REGIONAL HAZE.

The purpose of this section is to develop a long-term strategy for making reasonable progress toward the national goal of preventing any future and remedying any existing impairment of visibility in mandatory Class I Federal Areas which impairment results from manmade air pollution. (40 CFR 51.300) ( )

01. **NEED A CATCH LINE.** The Department will submit a long-term strategy that addresses regional haze visibility impairment for each mandatory Class I Federal Area within the State and for each mandatory Class I Federal Area located outside the State which may be affected by emissions from the State. (40 CFR 51.308(d)(3)) ( )

02. **NEED A CATCH LINE.** The long-term strategy must include enforceable emissions limitations, compliance schedules, and other measures as necessary to achieve the reasonable progress goals established by the Department. (40 CFR 51.308(d)(3)) ( )

03. **NEED A CATCH LINE.** In establishing long-term strategy for regional haze, the Department will meet the following requirements: (40 CFR 51.308(d)(3)) ( )

a. The Department will document the technical basis, including modeling, monitoring and emissions information, on which the State is relying to determine its apportionment of emission reduction obligations necessary for achieving reasonable progress in each mandatory Class I Federal Area it affects. The Department may meet this requirement by relying on technical analyses developed by the regional planning organization and approved by all State participants. The Department will identify the baseline emission inventory on which its strategies are based. The baseline emissions inventory year is presumed to be the most recent year of the consolidated periodic emissions inventory. (40 CFR 51.308(d)(3)(iii)) ( )

b. The Department will identify all anthropogenic sources of visibility impairment considered by the Department in developing its long-term strategy. The Department should consider major and minor stationary sources, mobile sources, and area sources. (40 CFR 51.308(d)(3)(iv)) ( )

c. The Department will consider, at a minimum, the following factors in developing its long-term strategy: (40 CFR 51.308(d)(3)(v)) ( )

i. Emission reductions due to ongoing air pollution control programs, including measures to address reasonably attributable visibility impairment: ( )

ii. Measures to mitigate the impacts of construction activities: ( )

iii. Emissions limitations and schedules for compliance to achieve the reasonable progress goal: ( )

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- iv.** Source retirement replacement schedules; ( )
- v.** Smoke management techniques for agricultural and forestry management purposes including plans as currently exist with the State for these purposes; ( )
- vi.** Enforceability of emissions limitations and control measures; and ( )
- vii.** The anticipated net effect on visibility due to projected changes in point, area, and mobile source emissions over the period addressed by the long-term strategy. ( )
- 04.** **NEED A CATCH LINE.** The Department will undertake the following process in developing the long-term strategy where interstate consultation is required. ( )
- a.** Where Idaho has emissions that are reasonably anticipated to contribute to visibility impairment in any mandatory Class I Federal Area located in another State or States, the Department will consult with the other State(s) in order to develop coordinated emission management strategies. ( )
- b.** The Department will consult with any other State having emissions that are reasonably anticipated to contribute to visibility impairment in any mandatory Class I Federal Area within Idaho. (40 CFR 51.308(d)(3)(i)) ( )
- c.** Where other States cause or contribute to impairment in a mandatory Class I Federal Area, the State must demonstrate that it has included in its implementation plan all measures necessary to obtain its share of the emission reductions needed to meet the progress goal for the area. If the State has participated in a regional planning process, the State must ensure it has included all measures needed to achieve its apportionment of emission reduction obligations agreed upon through that process. (40 CFR 51.308(d)(3)(ii)) ( )
- XXX. BART REQUIREMENT FOR REGIONAL HAZE.**  
The purpose of this Section is to implement the BART requirements in 40 CFR 51.308(e). The following analysis and documentation is required for each BART-eligible source; ( )
- 01. BART-Eligible Sources.** The Department shall identify a list of all BART-eligible sources within the State. (40 CFR 51.308(e)(1)(i)) ( )
- 02. BART Determination.** The Department shall complete a determination of BART for each BART-eligible source in the State that emits any air pollutant which may reasonably be anticipated to cause or contribute to any impairment of visibility in any mandatory Class I Federal Area. All such sources are subject to BART. (40 CFR 51.308(e)(1)(ii)) ( )
- a.** A single source that is responsible for a one (1.0) deciview change or more in any mandatory Class I Federal Area is considered to "cause" visibility impairment. ( )
- b.** A single source that is responsible for a one-half (0.5) deciview change or more in any mandatory Class I Federal Area is considered to "contribute" to visibility impairment. ( )
- c.** The determination of BART must be based on an analysis of the best system of continuous emission control technology available and associated emission reductions achievable for each BART-eligible source that is subject to BART within the State. In this analysis, the following must be taken into consideration: 1) costs of compliance; 2) energy and nonair quality environmental impacts of compliance; 3) any pollution control equipment in use at the source; 4) the remaining useful life of the source; and 5) the degree of improvement in visibility which may reasonably be anticipated to result from the use of such technology. (40 CFR 51.308(e)(1)(ii)(A)) ( )
- d.** The Department may determine that a BART determination for SO<sub>2</sub> or for NO<sub>x</sub> if a BART-eligible source has the potential to emit less than forty (40) tons per year of such pollutant(s), or for PM<sub>10</sub> if a

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BART-eligible source emits less than fifteen (15) tons per year of such pollutant is not required. (40 CFR 51.308(e)(1)(ii)(C)) ( )

**03. Alternative to Infeasible Emission Standards.** If the Department determines in establishing BART that technological or economic limitations on the applicability of measurement methodology to a particular source would make the imposition of an emission standard infeasible, it may instead prescribe a design, equipment, work practice, or other operational standard, or combination thereof, to require the application of BART. Such standard, to the degree possible, is to set forth the emission reduction to be achieved by implementation of such design, equipment, work practice, or operation and must provide for compliance by means which achieve equivalent results. (40 CFR 51.308(e)(1)(iii)) ( )

**04. BART Installation and Operation Due Date.** Each source subject to BART is required to install and operate BART as expeditiously as practicable, but in not event later than five (5) years after approval of the implementation plan. (40 CFR 51.308(e)(1)(iv)) ( )

**05. Maintenance of BART Equipment.** Each source subject to BART is required to maintain the control equipment required by the Department and establish procedures to ensure such equipment is properly operated and maintained. (40 CFR 51.308(e)(1)(v)) ( )

**06. BART Alternative.** As an alternative to the installation of BART for a source or sources, the Department may approve a BART alternative. If the Department approves source grouping as a BART alternative, only sources (including BART-eligible and non-BART eligible sources) causing or contributing to visibility impairment to the same mandatory Class I Federal Area may be grouped together. ( )

**a.** If a source(s) proposes a BART alternative, the resultant emissions reduction and visibility impacts must be compared with those that would result from the BART options evaluated for the source(s). ( )

**b.** Source(s) proposing a BART alternative must demonstrate that this BART alternative will achieve greater reasonable progress than would be achieved through the installation and operation of BART. (40 CFR 51.308(e)(2)) ( )

**c.** Source(s) proposing a BART alternative shall include in the BART analysis an analysis and justification of the averaging period and method of evaluating compliance with the proposed emission limitation. (40 CFR 51.308(e)(2)) ( )

**07. Reasonable Progress Goal Requirements for BART-Eligible Sources.** Once the Department has met the requirements for BART or BART alternative, as identified in Section xxx.06, BART-eligible sources will be subject to the requirements of reasonable progress goals, as defined in 40 CFR 51.308(d), in the same manner as other sources. (40 CFR 51.308(e)(5)) ( )